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### **REMARKS**

The present response is intended to be fully responsive to all points of rejection raised by the Examiner in the Office Action dated September 20, 2006, and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

### **Interview Summary**

Applicant would like to thank the Examiner for granting a telephonic interview on January 16, 2007, to the undersigned as Applicant's representative. In the interview Applicant's representative pointed out that Zhang's network management server 12 is not analogous to Applicant's claimed source device component, as the former does not model a physical network device as Applicant's claimed recitation requires, notwithstanding its interaction with Zhang's models (VNDs 38) of Zhang's physical network devices 16. Applicant's representative also pointed out the complete lack of messaging between Zhang's models (VNDs 38) of Zhang's physical network devices 16, let alone, as Applicant claims, the use of a simulated message between VNDs 38 to discover the path that a corresponding real message would take were it sent between physical network devices. The Examiner then suggested claim language that would distinguish Applicant's invention over Zhang, which language Applicant incorporates in the instant Amendment.

### **Status of Claims**

Claims 1 – 8 are pending in the application. Claims 1 – 8 have been rejected.

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## CLAIM REJECTIONS

### 35 U.S.C. § 102(e) Rejections

Claims 1, 2, and 8 have been rejected under 35 U.S.C. §102(e), as being anticipated by U.S. Patent No. 6,687,748 to Zhang et al. (hereinafter “Zhang”). Applicant respectfully traverses this rejection in view of the remarks that follow.

The purpose of Zhang is to test the abilities of a network management server 12 to manage multiple network devices 16 by simulating aspects of the network devices. Zhang does this by providing a simulation device 18 which hosts a virtual model (VND 38) of each physical network device 16. Simulation device 18 generates and sends alarms to server 12 and responds to polling requests from server 12.

The claimed invention models the devices of a physical network, but not to test a network management server. Rather, the claimed invention relates to using a model of a network to determine the path that a message would take if it were sent between devices of the physical network. It does so not by sending the message between the devices of the physical network, but rather by simulating the sending of a message between the models of the devices, which models are referred to as “device components”.

In Zhang, all communications take place between simulation device 18, which uses VNDs 38 to model the physical devices of Zhang’s network, and network management server 12, which does not model a device of Zhang’s network, but which itself is an actual physical device within Zhang’s network, and which is expected to act exactly as it would if it were receiving alarms and polling responses directly from Zhang’s actual physical network devices 16. No messaging take place between Zhang’s device models, being VNDs 38. Furthermore, in point #14 of the Office Action the Examiner admits that “...network management server 12 does not correspond to the claimed device component,” to which Applicant agrees. Thus, Zhang’s network management server 12 is not equivalent to Applicant’s “source device component” as recited in claim 1, and what messaging does

take place does so between simulation device 18 that models Zhang's network devices and network management server 12 that does not.

In contrast to Zhang, the claimed invention expressly relies on messaging between the models of the devices of a physical network, the models being the claimed device components. Such messaging is absent in Zhang. Furthermore, the claimed invention traces the path of the message within the model itself, rather than within the physical network that the model represents, to discover the path that the message would take within the physical network. Such a path discovery feature is also absent in Zhang. The Examiner's suggestion that path discovery is somehow derivable from Zhang's use of MIBs is *prima facie* incorrect, and in any case violates the requirement set forth in *Richardson v. Suzuki Motor Co.* that "the identical invention must be shown in as complete detail as is contained in the...claim". Zhang uses the term "path" only once, and in a completely unrelated context, and makes no reference to path discovery using any other language either.

Nevertheless, claim 1 is amended herewith to include elements of claim 2 limiting the model and the device components previously recited in claim 1, and now recites, *inter alia*:

"...providing a plurality of device components to model a physical computer network, each of said device components modeling an aspect of a network device of said physical computer network..."

Thus, by incorporating into claim 1 the limitation of claim 2 expressly defining "device component" as "modeling an aspect of a network device of said physical computer network", the recited "source device component" is even more clearly distinguished from Zhang's network management server 12 than before and leaves no room for doubt.

Point #4 of the instant Office Action further states:

"...sending a simulated network message...along a device component path [Fig. 1, the path between network management server 12 and VND 38]..."

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Thus, in point #4 the Examiner asserts that in Zhang the path between network management server 12 and VND 38 is equivalent to Applicant's "device component path" as recited in claim 1.

The definition of the recited "device component path" is provided in the specification at page 9, last paragraph, as:

"The path that a message would take in a physical network that is modeled by the architecture described hereinabove with reference to Figs. 1 – 3" that is "determined within the context of the model itself prior to actual physical transmission, rather than by observing actual message traffic within the physical network" (emphasis added). This language clearly refers to communication only between device components within the model, and precludes "actual physical transmission" of the message, which is what communications to and from Zhang's network management server 12 is. Thus, Zhang's path between network management server 12 and VND 38 is not equivalent to the recited "device component path". Nevertheless, claim 1 is further amended, and now recites, *inter alia*:

"...simulating sending a network message within said model of said computer network from a source device component modeling one of said network devices of said physical network to a destination device component modeling another of said network devices of said physical network along a device component path, wherein said simulated message only traverses any of said device components which model said network devices of said physical computer network...; (emphasis added)

This had previously been recited in the negative as "wherein said message does not traverse said computer network", and is now recited in the positive as "wherein said simulated message only traverses any of said device components". As point #14 of the Office Action states, "the claimed device components (DCs) correspond to multiple VNDs 38". Thus, in order to anticipate this feature of claim 1, Zhang would have to teach or suggest sending simulated network messages from one VND 38 to another VND 38, which Zhang does not do.

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In view of the above arguments, Applicant respectfully submits that claim 1 is not anticipated by Zhang under 35 U.S.C. § 102(e), and is therefore allowable.

Claims 2 – 8 depend directly or indirectly from independent claim 1, and are, *a fortiori*, deemed allowable.

Applicant therefore respectfully requests that the rejection of claims 1, 2, and 8 be withdrawn.

### **35 U.S.C. § 103(a) Rejections**

Claims 3 – 7 have been rejected under 35 U.S.C. §103(a), as being unpatentable over Zhang in view of U.S. Patent No. 6,728,214 to Hao et al. (hereinafter “Hao”). While Applicant respectfully traverses this rejection, claims 3 – 7 depend directly or indirectly from independent claim 1, and are, *a fortiori*, deemed allowable.

### **Conclusion**

Applicant respectfully submits that entry of the instant amendment and consideration of the above remarks renders the present application in condition for allowance, which action Applicant respectfully solicits.

### **Petition For One-Month Extension Of Time Under 37 CFR 1.136(a)**

The period for responding to the instant Notice was set to expire on December 20, 2006. Applicant hereby requests that the period for responding to the instant Office Action be extended by one (1) month, so as to expire on January 20, 2007. Accordingly, this response is being timely filed.

The fee for a Petition for a One-Month Extension of Time is Sixty Dollars (\$60.00) dollars for a small entity. The United States Patent and Trademark Office is hereby authorized to charge Deposit Account 501380 in the amount of \$60 and any additional fee which is necessary in connection with the filing of this amendment and petition.

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Favorable action on this response and petition is courteously solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Daniel Swirsky', written in a cursive style.

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